

# JUNE

at the

## CALIFORNIA ACADEMY OF SCIENCES

### JUNE MEETING

Date: Wednesday, June 24, 8:15 p.m.  
Place: Morrison Auditorium  
Speaker: Charles F. Hagar  
Subject: "THE GIANT TIDES OF FUNDY"  
and "NOVA SCOTIAN SUMMER"

Last summer, Professor Hagar (of San Francisco State College and a long-time associate and lecturer at Morrison Planetarium) journeyed to the colorful province of Nova Scotia to observe and photograph the Giant Tides of the Bay of Fundy. Twice each day, this spectacular phenomenon occurs, a sight unequalled in the world. By means of time-lapse photography, high and low tides were recorded at Halls Harbour where the boats sit on the pebbled harbor bottom at low tide and float near the wharf's rim at high. We are also taken to Moncton, New Brunswick to witness the famous Tidal Bore - a wall of water sweeping up the Pedicodiac River causing it to run backwards.

The tidal films are supplemented with others produced by the Canadian Travel Film Library: "Nova Scotia Saga" and "Glooscap Country".

### MORRISON PLANETARIUM

June 3 through June 29: "THE SEVEN WONDERS OF THE UNIVERSE", a look at some of the splendors of the heavens, from explosions on the sun to the mysterious rings of Saturn.

Performances daily at 3:30 p.m., with evening shows, Wednesday through Sunday, at 8:30 p.m. Extra matinees at 2:00 on Saturday and Sunday. The Planetarium is closed on Monday and Tuesday evenings.

Admission: Adults, 75¢, Juniors, 40¢.

Coming in July! "MOON LANDING!", Morrison Planetarium's summer spectacular.

### SPECIAL EXHIBITS

Exhibit of the Month: "PETRIFIED WOOD" from the Academy collections. Main Foyer, Science Museum.

Timepiece of the Month: "LIGHT-HOUSE CLOCK" loaned by Mr. Bruce A. Kock. On display in the William Barclay Stephens Horological Collection, Main Foyer, Science Museum.

"TAHOE WILD FLOWERS", water-colors by Caroline R. Chickering of San Francisco. Continues in Lovell White Hall of Man and Nature through June.

### "SCIENCE IN ACTION"

Thursday nights, 7:30 p.m., KTVU-TV, Channel 2  
JUNE 4: "THE SCIENCE OF MUSIC", with Guest Scientist Carleen Maley Hutchins, Guggenheim Fellow.

JUNE 11: "THE QUIET SUN" with Thiruvankata Krishnan, Radioscience Laboratory, Stanford University.

("SCIENCE IN ACTION" then goes off the air for the summer, to return in September for its 15th season.)

## NEWS and NOTES .....

As a heartfelt gesture to the memory of the late Ignatius McGuire, the staff of the Academy - through personal contributions - has been able to purchase the "Readers' Guide to Periodical Literature" for the J. W. Mailliard, Jr., Library. This valuable key to information is a further broadening of the library's services, a fact which would have pleased Mr. McGuire whose half-century of association with the Academy included many years in and about the stacks.

The 21 volumes in the series cover the years from 1900 to 1959.

Mr. H. Vannoy Davis, a Patron of the Academy whose name is long-familiar to the membership as a photographer-associate on many of Dr. Edward S. Ross' field and collecting expeditions, has once again joined the Academy's peripatetic Curator of Entomology who is currently in South America. Mr. Davis caught up with Dr. Ross at Tingo Maria, Peru. Their plans include a flight to the mouth of the Amazon and the area of Belem in Brazil.

After a month, Mr. Davis will fly back to San Francisco. Dr. Ross will continue on to Trinidad and to Washington, D.C. before returning home to the Academy.

The Special Libraries Association held a meeting at the Academy on May 21, hosts for the occasion being members of the staff of the J. W. Mailliard, Jr., Library. Featured speaker on the program, which included a wine-tasting ceremony and a catered dinner, was Mr. Jack B. Goldman whose subject was "The Adventure of a Literature Research, An Argosy or Odyssey."

### NICHOLAS VASIL UDALOFF

April 30, 1893 -- April 26, 1964

A most congenial man with expert hands, Mr. Udalloff helped to maintain the Academy from roof to basement. First employed in 1942, he brought with him a warm willingness, a desire to be of service that did not change over the years. We regret deeply the loss of a friend and co-worker.

If there is such in newspaper parlance, the following could be called a "fish interest" story. The Giant Sea Bass in Tank #20 of Steinhart Aquarium, a resident for eight years which saw him increase in weight from four pounds to ten times that amount, has led a solitary existence. Carnivorous by nature and known to react rather violently to any sort of intrusion, he has never known companionship of any sort.

In late April, four small yellow, blue and black fish (*Labroides dimidiatus*) from the Philippine Sea were deposited in the GSB's tank. They represented no more than a taste to the big-mouthed bass, but this held little or no interest. On their arrival, he circled the tank, then settled down on the aggregate covering the bottom, opened wide his gill covers (or opercula), and exposed the complexity inside. Forthwith, the "cleaner fish" as they are called proceeded to dart in and out of the gills, doing some housecleaning on the inside of the GSB, the latter patiently biding his time while the intimate service was rendered him. Later, they tidied up his dorsal fin.

The little "cleaners" continue to perform this strange rite in Tank #20. It is quite a menage à cinq. Come and see for yourself.

Photographs pertaining to the general history of the Academy, of previous staff members, activities, buildings, etc., - anything which would augment the present records of the Academy's background - would be welcomed in the Picture Collection, either as a gift or as a loan for reproduction.

Johan Kooy, who is in charge of the Collection, would also be happy to receive any illustrative material (current pictorial magazines, old textbooks, miscellaneous reference works, etc.) which could be clipped, annotated and incorporated in the picture files. Mr. Kooy may be reached at Extension 72 at the Academy. Reasonable pick-up and delivery service guaranteed!

(Continued on reverse)



## From the Academy Collections



Gigantic tortoises have fired the imagination of people for decades. Turtles so large a man can ride on their back, so old that they become traditional for several generations of a family, so heavy four or five men are needed to lift them -- these facts describe, in part, the giant land tortoises until recently found on a few isolated islands in the Indian and eastern Pacific oceans.

During the 16th and 17th centuries, voyagers who left accounts of their adventures and discoveries in the Indian and Pacific oceans speak of their encounters with these singular animals -- in the Galapagos, a group of volcanic islands about 600 miles off the western coast of South America, and on some isolated and remote islands of the eastern Indian Ocean, Aldabra, Reunion, Mauritius and Rodriguez. During the days of sailing vessels, when voyages oftentimes lasted several months, ships would call at the Galapagos or Mascarene islands and supplement their scant food supply with fresh tortoises, taking on upwards of 400 animals for this purpose.

According to the early travelers, on those islands inhabited by these giant tortoises, the animals were to be found in enormous numbers. Today, in the Galapagos, a few of these huge creatures still survive. For all their size they are vegetarians and subsist primarily on cacti, which they seem to eat with relative impunity from the sharp spines. Although there is no way to be sure absolutely of how long they live, available evidence suggests a maximum of 150 years, based on a specimen presented as a gift to the King of Tonga Island by Captain Cook, which died shortly after the turn of the present century (also based on another record cited by Dr. Albert Gunther in a paper published in 1875 in the Philosophical Transactions).

In 1905-1906, the Academy mounted a major expedition to the Galapagos Islands and obtained samples of these tortoises. Those specimens, together with more than 4000 lizards and snakes obtained by the expedition and now housed in the Academy, formed the cornerstone of the Academy's present worldwide herpetological research collections which now number in excess of 110,000 specimens.

(Photo by E. W. Gifford  
taken during the 1905-06  
expedition to the Galapagos)

Alan E. Leviton

## NEW MEMBERS OF THE ACADEMY

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